NOGEPA
NETHERLANDS OIL AND GAS EXPLORATION AND PRODUCTION ASSOCIATION

INDUSTRY STANDARD NO. 102

Safety Standby Vessels

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Index

NETHERLANDS OIL AND GAS EXPLORATION AND PRODUCTION ASSOCIATION

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This document will be controlled in accordance with the NOGEPA Industry Standard No. 80 on Standards and Document Control.

Terms and definitions

AIS	Automatic Identification System
ARPA	Automatic Radar Plotting Aid
DF	Direction Finder
FRC	Fast Rescue Craft
GPS	Global Position Standard
HF	High Frequency
IMO	International Maritime Organization
IAMSAR	International Aeronautical and Maritime Search and Rescue Manual
ISM	the International Management Code for the Safe Operation of Ships and for Pollution Prevention
MCA	Maritime Coastal Agency
MF	Medium Frequency
MHz	Megahertz
MODU	Mobile Offshore Drilling Unit
OIM	Offshore Installation Manager
PC	Personal Computer
PLB	Personal Locator Beacon
POS	Place of Safety, any onshore or safe offshore location or vessel (also a merchant vessel in the vicinity) where medical treatment and other facilities for the care of survivors are available. (Manned) platforms and shore based rescue craft, SAR helicopters and KNRM vessels are considered places of safety
SAR	Search and Rescue
SOLAS	Safety of Life at Sea (IMO)
STCW	Standards on Training, Certification and Watchkeeping for Seafarers (IMO)
VHF	Very High Frequency

Legal Requirements

3.37v	Working Conditions Decree

43	Mining Decree

Related Standards

Standard 001	Training for the Oil and Gas Industry
Standard 34	Rescue at sea

Important Nomenclature used in this Standard

In the context of this Standard and when so used to describe a method or practice:	
'shall'	means that such method or practice reflects a mandatory provision of law (in Dutch: *dwingend recht*). Such method or practice is mandatory for those who are the addressees of such provision (mostly the operators). A Standard can describe or quote, but not amend, mandatory provisions. When an operator in exceptional cases for technical, operational or HSE reasons cannot comply, exceptions shall be documented and reported, and risks mitigated. Please note that this does not release the operator from the obligation to comply with the law. *
'should'	means that such method or practice reflects a Good Operating Practice. An operator is generally expected to apply such method or practice, but a specific situation may require a specific alternative. In other words: the operator complies or explains, and documents the explanation. *
'could'	means that such method or practice is of an advisory nature or mentioned by way of example. An operator is not obliged to comply and is not obliged to explain if he does not comply.
* Please refer to paragraph 2.3 of Standard 80 (Standards and Document Control), for further explanation on an exception of a 'shall' provision, or on a comply-or-explain of a 'should' provision.	

1. Executive Summary

To provide a good prospect for survival in case of a calamity offshore in The Netherlands, safety standby vessels are one of the means next to offshore (SAR) helicopters to help realize this.

The Dutch offshore installations generally have less people on board when compared to the Installations in the Northern North Sea. Also the Dutch installations are often closer to shore when compared to the Northern North Sea. Dutch SAR helicopters based onshore in The Netherlands are the prime resource for rescuing people from offshore producing installations.

For this reason the requirements for safety standby vessels on the Dutch continental shelf are less. This necessitated a separate standard for safety standby vessels for the Dutch continental shelf[1].

Safety standby vessels are contracted as mitigation to offshore activities that are assessed to have an increased risk of (part of) crew ending up in the sea.

[1] Oil&Gas Emergency Response & Rescue Vessel (ERRV) Management Guideline & Emergency Response & Rescue Vessel (ERRV) Survey Guideline

2. Scope and application

2.1 Scope

Not every vessel is suitable to act as a safety standby vessel. In the context of rescuing people who have ended up in the sea from the offshore mining installation, a safety standby vessel must comply with certain requirements.

This NOGEPA Industry Standard gives an overview of the requirements set for the vessel and her crew to be able to function as a safety standby vessel on the Dutch Continental Shelf.

In addition to these requirements, naturally any requirements arising from the legislation of the safety standby vessel's flag state and from international treaties[2] are fully applicable. A sea going vessel that complies with these requirements and is further supported by an ISM-certified ship owner is eligible for the "Safety standby vessel" certificate.

The NOGEPA members have agreed to only deploy vessels with a valid "Safety standby vessel" certificate issued in accordance with this Industry Standard Safety Standby Vessels. Exception from this requirement is the acceptation of other Offshore Support Vessels (OSV) specifically designed, build and equipped with a certified FRC system. Such OSV is limited to small rescue operations and should only be considered for response where potentially one or two people may require to be rescued from the sea. For each case a Risk Assessment for operations should be made where the maximum of people that could have to be rescued are in line with the vessel management, crew capabilities/training and accommodation capacity.

2.2 Application

This NOGEPA Industry Standard is applicable to all safety standby vessels deployed by the NOGEPA members.

[2] Such as the International Convention for Safety of Life at Se (SOLAS), the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM code), EU directive 96/98 and relevant International Marine Organization (IMO) guidelines.

3. Introduction

3.1 The Emergency Response Plan – deploying the safety standby vessel

A large part of Dutch oil and gas exploration and production activities take place in the territorial waters and on the continental shelf. On the grounds of article 3.37v of the Working Conditions Decree an Emergency Response Plan must be formulated for each offshore mining installation situated in these waters.

The Emergency Response Plan shall indicate the manner and the resources with which people who have fallen overboard, or have ended up in the sea after evacuation from the offshore mining installation can be rescued. Getting rescued means being transferred to a safe haven alive. The following criteria[3] determine the deployment of the resources:

- A person without an immersion suit who has ended up in the sea must be rescued from the water within 20 minutes.
- A person with an immersion suit who has ended up in the sea must be rescued from the water within 120 minutes.

Times – man overboard scenarios	Without immersion suit minutes	With immersion suit minuters
Time to be removed from water	20	120
Transfer to place of safety	20	20

After being rescued from the water, the person should be transferred within 20 minutes to a Place Of Safety (POS). Safety standby vessels, other installations and helicopters are considered to be a place of safety.

Safety standby vessels are one of the resources with which people who have ended up in the water can be rescued. The Emergency Response Plan defines when or whether a safety standby vessel should be deployed in the direct vicinity of an offshore mining installation at any given point in time, to meet the 20+20 or the 120+20 minute requirement.

3.2 The safety zone

A safety zone of 500 metres is generally situated around an offshore mining installation to minimize the chances of collisions (article 43 Mining Act). This safety zone is only accessible for "attendant operations" for the offshore mining installation, including MODU's. Provided that

[3] NOGEPA Standard 34 Rescue at sea

this does not conflict with her tasks in the context of rescuing, the safety standby vessel will also be deployed to guard the safety zone.

Guarding of the safety zone requires the presence of an ARPA on the safety standby vessel (ref. paragraph 5.7.1.9).

4. Tasks of a standby vessel

4.1 Tasks

When in service a safety standby vessel should be immediately deployable at all times to:

- Rescue one or more people from the offshore mining installation who may have ended up in the water;
- Take on board people who have left the offshore mining installation with means of evacuation;
- Take on board part of or the entire crew who have left the offshore mining installation with the assistance of life boats under controlled circumstances;
- Administer first aid;
- Act as a safe haven;
- Be in command on site (function as “on scene coordinator” as per IAMSAR regulation).

If the circumstances dictate as such, a safety standby vessel can independently undertake action. In the event of an emergency on or around the offshore mining installation, the offshore installation manager (OIM) acts as the on-scene coordinator. When the OIM is not able to do so, then a suitably qualified[4] member of the safety standby vessel crew, may act as on-scene coordinator until the moment the Coastguard appoints another on-scene coordinator.

4.2 Relationship with emergency response plan

A safety standby vessel should be able at all times to demonstrate that she complies with the performance standards[5] defined in the Emergency Response Plan. During helicopter operations the safety standby vessel should be positioned in a safe agreed position. If the platform is unmanned the safety standby vessel remains outside the 500m zone but in the vicinity at such a distance that it can still meet the rescue and recovery times. Sharing of a safety standby vessel between two installations is only allowed after calculation of distances with taking into account the environmental forces. Approval for sharing is to be obtained between Operator and vessel Operator.

[4] A person who had passed the “On Scene Coordinator” course, see paragraph 6.2.
[5] The 20+20 and 120+20-minute requirements, see paragraph 3.1..

5. Organization on a safety standby vessel

5.1 The rescue plan

The safety standby vessel should have a rescue plan. The rescue plan relates to the rescue tasks of the safety standby vessel: rescuing persons who have ended up in the sea (from the offshore mining installation). This plan is formulated in English and contains at least a description of:

- The procedure, agreed with the Coastguard, relating to the role and support of the safety standby vessel in coordinating and executing rescue activities;
- The safety standby vessel's coordinating role with respect to other ships in the vicinity with respect to rescue operations;
- The onsite chain of command on board the safety standby vessel;
- The tasks of the individual crew members of the safety standby vessel and the FRC with regard to the organization and the execution of the search and rescue operations for persons who have ended-up in the water or persons in or on lifeboats or life-rafts;
- A search plan and search patterns;
- How (injured) persons are taken on board and treated;
- How and from whom advice or medical support is sought;
- How (injured) persons are transported and/or transferred to and from other vessels/ helicopters or offshore mining installations;
- How approval for the transport of (injured) persons is requested;
- How deceased persons are stored in the designated area.

The rescue plan must at least cover the following scenarios:

- Search operation with the safety standby vessel;
- Search operation with the FRC;
- Rescue operation with the FRC.

The rescue plan should fit in with the Emergency Response Plan of the offshore mining installation, Emergency numbers should be part of the bridging document. Rescue plan shall be defined as per IAMSAR.

5.2 Registration

All drills should be registered in the vessel's log (see paragraph 7.2). A brief report should be written on all drills, including the duration of the various elements and all other relevant information.

The ship owner should maintain a register of all the certificates, training and courses obtained or followed by the crew of the safety standby vessel. This register should be available for perusal by interested parties. Wherever possible, an overview should be maintained on the safety standby vessel of all persons retrieved from the water.

6. The crew on a safety standby vessel

A safety standby vessel should be manned in such a way that the vessel can properly execute all tasks for which it can be deployed.

6.1 Number of crew members

The number of crew members on a safety standby vessel is determined by the performance norms defined in the offshore mining installation's Emergency Response Plan and the safety standby vessel's rescue plan. The minimum number of crew members on a safety standby vessel on the Dutch part of the continental shelf is 8 (the captain, the first mate and 6 other crew).

6.2 Qualification, experience and training

Qualification[6]

- The captain or the first mate should have passed the "On Scene Co-ordinator" course for safety standby vessels referred to in annex II, or a similar course recognised by MCA.
- All crew members must be in the possession of an STCW A-VI /1 "Basic Safety Training" certificate (max. 5 years old).
- At least three (3) crew members must be in possession of a valid STCW A-VI / 4-2 "Medical Care" certificate, or a certificate similar in the opinion of the ship owner (max. 5 years old).
- The remaining crew members (other than the crew member with the "Medical Care" certificate) must be in the possession of a valid STCW A-VI / 4-1"Medical First Aid" certificate (max. 5 years old).
- At least four (4) crew members (not the captain or the chief engineer) must have a valid STCW A-VI / 2-2 Proficiency in Fast Rescue Boats (FRC) certificate (max. 5 years old).
- At least one (1) FRC crew member must be authorized to operate the FRC radio Installation.

[6] The safety standby vessel crew should be qualified in accordance with the requirements of the relevant flag state and the STCW. The requirements defined here are supplementary.

Function	Trainig Qualification					
	On-Scene Coordinator	STCW A-VI/1 Basic Safety Training	STCW A-VI / 4-2 Medical Care	STCW A-VI / 4-2 Medical First Aid	STCW A-VI / 2-2 Proficiency FRC	FRC Radio Installation
Captain	√					
First Mate	√					
All Crew		√				
3 crew members			√			
Remaining crew members				√		
4 crew members (not captain)					√	
1 FRC crew member						√

Experience

The captain should have worked for at least 40 days as first mate and at least 2 other crewmembers should have worked for at least 40 days as a crewmember on a safety standby vessel on the North Sea.

Training[7]

The safety standby vessel crew should be trained as a team in executing rescue operations from the safety standby vessel. To this end, before commencing the sea voyage to the offshore mining installation, they should carry out a 'man overboard' drill with an FRC in controlled circumstance and familiarise themselves with their tasks as described in the rescue plan. This drill must be registered in the safety standby vessel ship's logbook.

Whilst on location the safety standby vessel should at least once a week execute one or more of the following drills whereby the OIM acts as on-scene coordinator:

- Man overboard (one as well as several drowning persons), both from the safety standby vessel and from the offshore mining installation, with and without the use of the FRC. The NLCG will be kept posted of MoB drills;
- Applying the communications procedure;
- Searching whilst using PLB homing equipment;

[7] These drills are not intended to verify that the safety standby vessel complies with the performance norms as defined in the emergency plan.

- Sailing with search patterns by day and by night both with the safety standby vessel and the FRC;
- Taking injured persons on board from the FRC or other rescue means and further First Aid activities;
- Use of other available emergency and rescue means;

From week to week drills should be varied as much as possible. In consultation with the OIM, they can be carried out separately or combined.

6.3 Language

The crew should be able to communicate properly amongst each other. The crew should speak and understand sufficient English to be able to properly carry out the tasks described in the plan.

6.4 Working hours

The crew of the standby vessel should not remain in active service on the safety standby vessel longer than 28 consecutive days. This period does not include the time necessary to sail to and from the location. If the crew spent fewer than 28 consecutive days on active service on the safety standby vessel the number of rest days may be reduced proportionally. Rest days should be adequate before returning to another tour of duty on the safety standby vessel.

7. The safety standby vessel

A safety standby vessel is a sea going vessel designed, organized, equipped and maintained in such a way that she can carry out her tasks properly at all times.

7.1 Technical requirements

7.1.1 Design requirements

In addition to the rules arising from the legislation of the relevant flag state or international treaties, the vessel should also comply with the following design and equipment requirements:

- A length of at least 30 meters;
- The capability of attaining a speed in calm seas of at least 10 knots and of maintaining its position in winds of force 7 on a Beaufort scale;
- Equipped with at least one of the following facilities:
    1. A 360-degree azimuth thruster combined with single-screw propulsion with reversible effect or an adjustable screw. The thruster should be able to provide the vessel with a forward speed of 4 knots through the water. The thruster should not depend on the main engine as power source.

2. Double screw propulsion and a bow thruster so the vessel can attain a forward speed of 4 knots in calm seas even if one of the propulsion units is out of order.
3. Main and maneuver propulsion systems that can deliver similar performances and that possess similar maneuvering capabilities as the system described under 1 and 2.

- Equipped with bridge operation that makes it easy for the vessel to be maneuvered by one crewmember;
- Equipped with a bridge-house designed and positioned in such a way that the person in charge of the rescue operation can easily move from port to starboard and vice versa and has an uninterrupted view all round of the rescue zone and the place where the FRC is launched and recovered;
- The capability of simultaneously using all electric equipment that might be needed in an emergency;

- Having sufficient reserve and replacement power sources with sufficient capacity alone or together to allow the rescue operations to continue[8] for at least an hour after the main power supplies fails;
- The capability of swinging around in both directions through 360 degrees at as low a speed as possible and maintaining a position with sufficiently certainty on a previously set course while executing rescue activities.

7.1.2 Freeboard and rescue zones

- On both sides of the vessel a safety standby vessel should be equipped with an obstacle-free deck space with a length of at least 3m and a width that provides free passage for persons carrying a stretcher (the so called "rescue zone"). On both sides of the vessel the word "Rescue Zone" should be written clearly in a striking colour on the hull at the location of these rescue zones;
- The rescue zone should be localised in such a way that the effect of propeller and /or thrusters is noticed as little as possible;
- The freeboard at the location of the rescue zone should be a maximum of 1.75m unless it has been demonstrated that a higher freeboard does not impede taking person on board;
- The deck should be equipped with an anti-slip layer at the location of the rescue zone, for the protection of the crew. Provisions should be made to prevent the crew from being knocked overboard.

7.1.3 Climbing nets and rescue nets

A safety standby vessel should be either equipped with climbing nets along the total length of the rescue zone on both sides or have another system with which people can come on board the vessel from the sea or from an FRC.

If climbing nets are used, then they should comply with the following conditions:

- Made of knotted certified rope at least 2.5 centimeters thick;
- Have a mesh with no more than 30 centimetres;
- Easy to fit and lower;

[8] This means that, with the aid of the reserve and replacement power sources, for an hour at least:
- The position of the safety standby vessel can be determined at all times in relation to the relevant offshore mining installation;
- The bridge, the decks and the accommodation are sufficiently illuminated to enable efficiently carrying out the activities necessary for recovery survivors and administering first aid;
- Showers, washbasins and drinking water facilities can be supplied with fresh water;
- The FRC can be launched in a controlled manner;
- Communication is possible with the offshore mining installation, the supporting on-shore organisation and the supporting helicopter.

- Weighted at the bottom and reaching in lowered state to at least 50 centimetres below the water level;
- In lowered state the upper bit is at least 25 centimetres removed from the hull of the safety standby vessel;
- Be fitted with a sufficient number of horizontal spreaders.

If a system other than climbing nets is used, that system must fulfil the following conditions:

- Have a sturdy anti-slip climbing and gripping surface that is at least as good as the climbing net;
- Be made of materials resistant to maritime conditions;
- Be designed in such a way that no injury is inflicted to the users;
- Be designed in such a way that it hangs at least 25 cm free from the hull of the safety standby vessel;
- Can be used on both sides of the safety standby vessel.

A safety standby vessel should also be equipped with either a rescue net with hoisting tackle or at least one mechanically operated system for bringing (unconscious) persons on board. The hoisting tackle can also be used for launching and recovery of the FRC.

If a rescue net is used, then it should meet the following conditions:

- Have a diameter of at least 2 metres;
- Be suitable for supporting a weight of 400 kilos;
- Can be lowered deep enough into the water for persons in the seas to be able to get into the net easily.

If a system other than a rescue net is used then that system must be designed in such a way that it causes no injury to users.

Systems referred to in this part with which no practical experience has been gained should be tested and certified by a certification body which has been approved by the IL&T Inspectorate, Shipping Department (Inspectie Leefomgeving & Transport, divisie Zeescheepvaart) .In addition safety standby vessels should be inspected annually by an independent competent person to ascertain fitness of safety critical items.

7.1.4 Man overboard alarm

There should be a ‘man overboard’ alarm which can be operated from the bridge that is clearly audible throughout the entire vessel. It should be independent and clearly distinguishable from other alarm signals.

7.1.5 Navigation Equipment

The bridge of a safety standby vessel should be equipped with electronic navigation equipment consisting of at least:

- 2 radars, of which at least 1 course stabilised and operating in the 3 cm band and 1 equipped with ARPA function;
- 2 electronic positioning systems type GPS or similar positioning systems;
- 1 gyro compass;
- AIS linked to a radar with an ARPA plot facility or to a PC with electronic map system so that AIS, radar and ARPA information can be presented on one screen;
- A plb finder

7.1.6 Lighting

Deck lighting

The sea around the rescue zone, the rescue zone, the area where the FRC is launched and retrieved and the helicopter winching area should be properly lit without persons on the bridge or the helicopter pilot being blinded.

When using floodlighting, the time between switching on the lighting and the presence of sufficient light should be as short as possible[9].

Emergency lighting

Permanently mounted emergency lighting, connected to an emergency power source should be present at the following locations:

- FRC location and hoisting system;
- Rescue zone;
- Reception area;
- Routes leading to and from the reception area;
- Treatment area;
- Helicopter winching area.

Search lights

A safety standby vessel should have at least 2 permanently installed searchlights that can be operated from the bridge and rotated through 360 degrees, with which as large an area as possible of the surface of the sea can be properly illuminated. The searchlights should have a power of at least 1.000 watt.

[9] The fact should be taken into account that when restarting certain types of lamps after a power failure of voltage drop, it takes some time before the lamp gives light at sufficient strength.

7.1.7 Helicopter winching area

A safety standby vessel should have a helicopter winching area. The helicopter winching area can be used for dropping doctors or lifting stretchers from the helicopter.

7.1.8 Obstacle free maneuvering passage

Passage and means for the transport of stretchers should be guaranteed at all times between the rescue zones, the reception area and the helicopter winching area.

7.1.9 Towing

A safety standby vessel should be equipped for towing (life) rafts and lifeboats.

7.2 Equipment requirements

7.2.1 Rescue equipment

A safety standby vessel should have at least eight lifebuoys, of which 2 with self-igniting electric lights and smoke signals and 2 with self-igniting electric lights. The remaining lifebuoys should be fitted with floating lines of a length of 30 metres. Lifebuoys should be fitted in easily accessible places.

In addition to the number of lifejackets that are required to be on board on the grounds of other regulations, there should be as many as necessary to equip all persons at the offshore mining installation with a lifejacket.

A safety standby vessel should have 2 poles of a length of at least 5 metres with a rounded-off hook at the end, for saving people from drowning.

There should be an electronic megaphone on the bridge of a safety standby vessel.

7.2.2 Manuals and documents

The following should be present on a safety standby vessel:

- The IMO IAMSAR Manual (part 3);
- The offshore mining installation's Emergency Response Plan or an excerpt;
- The offshore mining installation's adverse weather policy;
- A copy of the Safety standby vessel certificate.

7.3 Receiving and caring for survivors

7.3.1 Accommodation

A safety standby vessel should be certified to provide permanent seating for the maximum number of people that can be accommodated on the offshore mining installation or MODU for which it is deployed.

Survivors should be accommodated in areas that provide protection from the elements. These areas should be furnished, heated, lit and ventilated and situated outside crew's headquarters, the sanitary facilities and the bridge. They should be equipped with sufficient entrances and emergency exits, easily accessible from the rescue zone and the helicopter winching area and situated and designed in such a way that the transport of survivors, including those on stretchers, can take place quickly and easily. Vertical transport should be avoided wherever possible.

The deceased should be stored in a cool, ventilated area in such a way that bodies cannot shift due to vessel motion and that they are kept out of sight of the survivors. This area should provide room for at least 5 bodies.

A safety standby vessel should have at least the following rooms, separate from the crew's quarters:

- Washroom;
- Reception area;
- Treatment area;
- Sanitary facilities.

The doors of the various rooms should be clearly labelled showing what they serve as and for how many people they are intended.

Washroom

The decontamination area should be near the rescue zone. The area may be partly open and should be equipped with a shower system suitable for cleaning rescued persons and crewmembers before entering the reception area.

Reception room

The reception room should be equipped with a desk, seating for a minimum of five survivors and a cupboard of filling cabinet for storing information on the survivors.

Treatment area

The treatment area should have a surface area of no less than 10 m^2. The room should be sufficiently lit to treat patients.

The treatment area should be equipped with:

- Treatment table accessible from both sides and the foot end;
- Work lamp above the treatment table;
- Hand basin with hot and cold running water;
- Shower head with hose long enough to reach the treatment table;
- Cupboards for medicines, etc;
- Hooks on which infusion bottles can be hung next to the treatment table and the berths;
- Hands-free telephone connected to the radio installation for direct communication with medical advisors at on shore and offshore mining installations;
- Clock with second hand.

Sanitary facilities

The sanitary facilities should include 2 showers, 2 toilets and 2 hand washbasins. These should be easily accessible from the areas where the survivors are accommodated.

7.3.2 Facilities

In addition to the fresh water for the crew, a safety standby vessel should have at least 100 litres of fresh water available for each person at the offshore mining installation. If this water is stored separately it should be changed at least once a month. The safety standby vessel should have a Legionella control plan.

A safety standby vessel should have facilities for heating water, which provide a constant supply of at least 160 litres an hour for two hours at a temperature of a minimum of 65 °C. When establishing the heating capacity, the hot water in the heat exchangers may be incorporated.

It should be possible at all times to serve survivors with hot drinks and soup on the safety standby vessel.

The safety standby vessel should have at least the following for administering to and caring for survivors of the offshore mining installation:

- The resources and equipment defined in Annex I;
- 5 stretchers suitable for transport both on the safety standby vessel and to another vessel or helicopter;
- 75 ordinary blankets and 75 towels or as many more as are needed to supply all persons on the offshore mining installation;
- 75 anti-hypothermia blankets or bags (T.P.A.) or as many more as needed to supply all persons at the offshore mining installation;
- Dry replacement clothes (overalls) for 75 or as many as there are persons at the offshore mining installation.

These supplies and equipment should be stored in a properly marked place and be ready for use at all times. The medical equipment and supplies listed in Annex I should be checked by a pharmacist at least every 24 months.

7.4 Fast Rescue Craft

7.4.1 Number and capacity

Every safety standby vessel should be equipped with at least one FRC. Every FRC should comply with LSA-Code (International Life-Saving Appliances Code (MSC.48(66)).

It should be possible to transport at least 9 persons sitting or one person lying stretched out together with 5 sitting persons in the FRC. These numbers include the crew of the FRC.

7.4.2 Availability and number of crewmembers

The FRC should be ready for deployment at all times. The FRC should be in the water with the engine running and ready to start rescue operations no longer than 5 minutes after the order to launch. The FRC should have a crew of at least 3 persons.

7.4.3 Equipping the crewmembers

Each FRC should have 4 lifejackets that comply with ISO-NEN-EN 12402-2 or a similar standard for the crew. If inflatable lifejackets are used, then these should deliver at least an equal performance and they may only be of the semiautomatic type.

The crew of the FRC should be equipped with:

- A buoyant immersion suit (survival suit / anti exposure suit) manufactured as per latest SOLAS legislation and approved to be suitable for the working environment in emergency conditions)
- A PLB

7.4.4 Stowing

The FRC should at all times be stowed for heavy weather, yet in such way that it can always be deployed immediately.

7.4.5 Launching and recovery

An FRC should be launched, wherever possible, amidships of the safety standby vessel, over a smooth side or over special launching facilities with slipways.

The safety standby vessel should have its own hoisting system for launching and recovery an FRC. In addition to the regulations ensuing from the SOLAS, this system should comply with the following requirements:

- It should be possible to launch an FRC while the safety standby vessel is sailing with a reduced speed which maximum is determined for safe operation;
- It should be possible to launch an FRC at a descending speed of between 0.3 and 1.0 metres per second;
- It should be possible for a fully occupied FRC to be shipped at a hoisting speed of at least 0.3 metres per second. The hoisting system should be certified for this;
- If an FRC's hoisting point is at a height of more than 7.5 metres above sea level in calm seas, then measures should be taken to prevent the FRC from swinging. In that case, the FRC should be launched away from the side of the vessel;
- It should still be possible to launch an FRC if there is a failure of the drive in the hoisting system.

Hoisting systems that cannot take a fully occupied FRC should be clearly marked as such.

7.4.6 Equipment

In addition to the regulations ensuing from LSA Code (MSC.48(66)) an FRC should be equipped with:

- Radar transponder and reflector;
- VHF radio;
- A net or cradle system for recovery of persons from the water. The system should be designed to recover the person in a horizontal position with least effort by the crew;
- Equipment for towing rescue rafts and lifeboats;
- A potable search light;
- A compass;
- A first aid kit;
- Paddles;
- Boathook.

7.4.7 Speeds

The FRC should be able to attain the following speeds, measured in calm seas:

- A minimum speed of 20 nautical miles per hour with a crew of 3persons;
- A minimum speed of 8 nautical miles per hour for at least 2 hours while the FRC is fully loaded;
- A minimum speed of 2 nautical miles per hour while the FRC is towing a liferaft.

7.4.8 Engines

The engines of an FRC should be operational at all times. It should be possible to start and test them on deck. Whenever possible, the engines of an FRC should be tested daily.

An FRC with engines running on petrol should have a reserve engine with the same specifications. The crew should be able to fit this engine.

Tools and spare parts as indicated by the manufacturer or the supplier should be on board in order to carry out maintenance of the FRC and its engines on location.

There should be sufficient fuel for immediate use in a suitable storage place.

7.5 Radio Communication[10]

The IMO Standard Marine Communication Phrases and Aeronautical terminology are used for radio communication.

Internal

The safety standby vessel should have sufficient internal communication facilities between the bridge, the areas where the survivors are, the captain's cabin, the areas where crewmembers are on standby and the helicopter winching zone as well as between the bridge, the rescue zone and the FRC launch site.

External

The safety standby vessel should have sufficient facilities for the external radio communication. It should be possible to communicate at all times on predetermined frequencies between the vessel, offshore mining installations, FRC's, helicopters and the shore via MF, HF, VHF of satellite communication systems.

FRC

Radio communication between the FRC and the safety standby vessel should be possible while the FRC is sailing.

Helicopter

The safety standby vessel should be able to communicate with a helicopter and, in an emergency, should be able to locate it. The safety standby vessel should therefore have the following facilities:

- Direction finder receiver suitable for receiving on the aviation emergency frequency 121.5 MHz;
- Transmission and reception equipment suitable for communication on, at least, the aviation frequencies, the 121.5 MHz aviation emergency frequency and the 123.0 MHz[11] SAR frequency.

[10] The necessary communication should be approved by the relevant governmental body
[11] The 121.5 MHz and the 123.0 MHz emergency frequencies may only be used in emergencies.

8. Certification

8.1 Certification requirements

A sea going vessel that complies with the requirements ensuing from the legislation of the safety standby vessel's flag state, from international treaties and this NOGEPA Industry Standard for Safety standby vessels and is furthermore supported by an ISM-certified ship owner is eligible for the Safety standby vessel certificate for the Dutch continental shelf.

8.2 Certifying bodies

The safety standby vessel certificate is only issued by a certifying body appointed by the IL&T Inspectorate, Shipping Department (Inspectie Leefomgeving & Transport, divisie Zeescheepvaart) or by a Classification agency recognised by this body.

8.3 Certificate validity

The certificate clearly states that this Industry Standard has been complied with and that it is valid for a period of 5 years. Annual verification by a recognized organization must be carried out to ensure that the requirements defined in paragraph 8.2 are still being complied with. The certificate is withdrawn if the safety standby vessel, its crew or the ship owner no longer complies with the certification requirements. If the safety standby vessel is at sea on the date when the certificate expires, then the certifying body can extend the certificate up until the date of arrival in a port, as long as the additional period is no longer than 14 days.

A certificate should contain at least the information defined in Annex III.

Annex I Medical equipment and supplies on board a Safety Standby Vessel

A safety standby vessel must have at least 5 body bags on board.

The following must be available on board a safety standby vessel for treating the injured:

1. Medicines and other medical resources for acute conditions

These may only be used by or on the instructions of a doctor.

The medicines in this kit must be supplied by a pharmacist. They must be labelled with a date and checked at least twice a year by a pharmacist.

The kit must be stored in a cool, dry, closed place and under the supervision of the captain.

The content of the kit consists of at least the following per fifteen (15) expected survivors:

A. Injection fluid in case (with ampoules and saws):	*Quantity*
Ampoules (1 ml) morphine hydrochloridum - 10 mg/ml	2
Ampoules (1 ml) pethidine hydrochloridum 50 mg/ml	2
Ampoules (10 ml) aminophylline 25 mg/ml	2
Ampoules (1 ml) atropine sulphas 0.5 mg/ml	2
Ampoules (2 ml) diazepam 5 mg/ml	1
Phial (1 ml) prednisolon natrium succinate 25 mg + aqua ad iniectabilia	1
Bottle or infusion fluid bag (500 ml) natrium chloride 0.9% (infusion fluid)	3
Bottle or infusion fluid bag (500 ml)haemacel plasma replacement	3

B. Miscellaneous	*Quantity*
Endotracheal tubes (2 x 7.0 + 2 x 8.0) with laryngoscope	2+2
Disposable syringes - of 2 and 10 ml	5
Disposable needles of -- 16 x 0.5 mm and 40 x 0.8 mm sterile	5
Disposable gloves in various sizes	10
Intravenous infusion kits complete with cannula	3
Extra intravenous cannulae, fitting infusion kit	3
Bottle (125 ml) solution chlorhexidine spirituosa 0.5%	1
Sterile urinary catheters (Thiemann Ch.16) + sterilely packaged lubricant	4
Waterjel Fire blankets (183 x 152 cm)	4

Minimum requirement of items to be on board:

Description	*Quantity*
Clinical thermometer	1
Suture kits made from stainless materials in stainless dish, consisting of at least: • Tweezers with curved ends • Anatomical tweezers • Surgical tweezers • Scalpel shaft with separate sterile blades • Needle holder Mathieu 17 cm • Arterial clamp according to Kocher • Sequestrum forceps 25 cm	3
Suture material kits consisting or at least: • atraumatic suture ethilon 3-0 • atraumatic suture ethilon 4-0 • atraumatic absorbable sutures e.g. monocryl or vicryl 3-0 • atraumatic absorbable sutures e.g. monocryl or vicryl 4-0	2
Sterile operation gloves in various sizes	5
Phials (10 ml) Lidocaine hydrochloricum 2% (for local anaesthesia without vascular narrowing agent)	4
Kidney dishes (stainless steel)	2
Case of urine test strips (x 50)	1
Ring sawing plier	1
Membrane stethoscope	1
Sphygmomanometer (aneroid), optional extra electronic blood pressure meter	1
Oxygen case with a supply of at least 1,500 litres of medicinal oxygen	1
Resuscitation bulb for manual respiration	1
List of contents	1

2. Dressing, nursing and treatment items

This kit must be stored in a separate cool, dry place and under the supervision of a person appointed by the captain.

The contents of this kit consists of at least the following per 15 expected survivors:

Description	*Quantity*
Boxes/packets surgical cotton wool 100 g	4
Packets of sterile hydrophilic gauze 5 x 5 cm, x 16	5
Packets of sterile hydrophilic gauze 10 x 10 cm, x 25	1
Rolls hydrophilic gauze bandage 4m/6cm	15
Rolls cambric bandage 3m/8cm	15

Packets emergency bandage no. 1 (small)	5
Packets emergency bandage no. 2 (middle)	5
Packets emergency bandage no. 3 (large)	5
Metalline (burn) bandage packs 35 x 45 cm	5
Metalline (burn) bandage dressing 80 x 120 cm	1
Ideal bandage 8 cm	2
Rolls sticking plaster 5 m/1.25 cm	2
Rolls sticking plaster 5 m/2.50 cm	2
Dropping bottles (30 ml) povidon iodide 10 mg	2
Bottle (250 ml) solution chlorhexidine 1.5% + cetrimide 15% (disinfecting agent)	1
Rustproof safety pins in various sizes	10
Wooden or plastic throat spatulas	10
Indestructible urinals	2

Minimum requirement of items to be on board:

Description	*Quantity*
Nest of inflatable splints in various sizes up to 40 cm	1
Stainless bedpan	1
Bandage scissors stainless steel rounded points 18 cm	2
Respiration tubes for adults	4
List of contents	1

3. Medical equipment on the FRC

The equipment must be stored in a closed, waterproof container and placed in each FRC before it is launched.

Part	*Quantity*
Standard medical equipment according to SOLAS	1

Annex II Course information and training criteria On-scene Co-ordinator

(This is a copy of the relevant section of NOGEPA Industry Standard 001, Training for the Oil and Gas Industry. Standard 001 is the leading document for Nogepa Training.)

Course Type:
Calamity training (specialist)

Intended for:
Captains and First-mates of Offshore Support Vessels.

Objective:
To train the delegate in acting as On Scene Coordinator with the aid of bridge simulator scenario's.

Learning targets:

- Thorough knowledge of the Search and Rescue organization;
- Thorough knowledge of the tasks of the SAR Mission Controller, the Rescue Coordination Centre, the On Scene Coordinator and the Aircraft Coordinator;
- Thorough knowledge of IAMSAR and OPPLAN SAR;
- Use of GMDSS during SAR operations;
- Thorough knowledge of surge patterns and surge areas;
- Thorough knowledge of the influences tides and wind;
- Assessing the situation;
- Compose a rescue plan;
- Use of leeway charts and descent data;
- Commanding the available support units;
- Control of on scene radio communication;
- Controlling of situation reports;
- Informing the RCC; and
- Preparing the relevant reports.

Duration:
Three (3) days.

Validity:
Five (5) years.

Condition for participation
Knowledge of GMDSS procedures, navigation and Radar/ARPA.

Annex III Model Safety Standby Vessel certificate

"Inspection certificate for safety standby vessels for offshore mining installations"

Name:

IMO number:

Home port:

Gross tonnage:

Length:

The vessel has been inspected for the criteria contained in the Guideline for safety standby vessels (version dated …). The vessel has proved to comply with these requirements.

Inspection date:

Inspector's name:

Inspector's signature:

Classification agency:

Certificate expiry date: